Contents of Volume 16

No. 1

T. C. Pierson: Soil pipes and slope stability 1

D. A. Bruce & J. P. Millmore: Rock grouting and water testing at Kielder Dam, Northumberland 16

T. E. Dibb, D. W. Hughes & A. B. Poole: Controls of size and shape of natural armourstone 31

A. U.-E. Oteri: Delineation of saline intrusion in the Dungeness shingle aquifer using surface geophysics 43

A. Siva Subramaniam & R. W. Carr: A55 Pwll Melyn Slip and remedial works: a case history 53

R. J. Flavin & J. B. Joseph: The hydrogeology of the Lee Valley and some effects of artificial recharge 65

B. Stimpson: The magnitude of displacement along clay mylonite shear zones 83

Discussion by J. A. Bland 85

No. 2

Call for papers i

Photographic feature: In situ treatment of a deeply weathered band of crystalline limestone, Victoria Dam ii

Notices from the Engineering Group of the Geological Society iv

L. F. Linney: A review of the geotechnical aspects of the construction of the first phase of the Mass Transit Railway, Hong Kong 87

P. L. Berry: Application of consolidation theory for peat to the design of a reclamation scheme by preloading 103

G. West: Comparisons between real and predicted geology in tunnels: examples from recent cases 113

W. R. A. Knox & M. Zacas: The engineering behaviour of jointed rock mass models composed of weak and strong strata 127

D. Jackson & J. W. Lloyd: Groundwater chemistry of the Birmingham Triassic Sandstone aquifer and its relation to structure 135

J. A. Bland: Fitting failure envelopes by the method of least squares 143

T. E. Dibb, D. W. Hughes & A. B. Poole: The identification of critical factors affecting rock durability in marine environments 149

Discussion by J. C. Doornkamp 163

Book reviews 165

No. 3

Photographic feature: Tythegston quarry landfill site ii

R. Toynton: The relation between fracture patterns and hydraulic anisotropy in the Norfolk Chalk, England 169

K. R. Nunn, R. D. Barker & D. Bamford: In situ seismic and electrical measurements of fracture anisotropy in the Lincolnshire Chalk 187

P. F. Jones & E. Derbyshire: Late Pleistocene periglacial degradation of lowland Britain: implications for civil engineering 197

P. C. Horner: Specifications for bulk and selected fill materials in highway and other projects 211

R. J. Kettle: The improvement of colliery spoil 221

L. A. Ajayi, R. J. Epps, P. Farrington & A. D. Robinshaw: Deposition and engineering properties of sediments in the Lagos area and their influence on recent development 231

L. Clark: Notes on water movement in the unsaturated zone 241

Discussion by M. Dunbavan and J. V. Hamel & H. F. Ferguson 243

J. W. Hooper: Engineering geophysics *Report of meeting* 247

Book reviews 251

Proceedings of the Engineering Group of the Geological Society, 1981–82 . . 255

No. 4

Photographic feature: Design and construction of the Kowyn's Pass rockfall shelter ii

Engineering Implications of Earth Surface Processes

E. N. Bromhead: Introduction 259

C. N. Edmonds: Towards the prediction of subsidence risk upon the Chalk outcrop 261

R. E. Williams & R. A. Mure: The investigation and design of cuttings in stiff Pliocene clays of Lattakia, Syria 267

H. E. Steward & J. C. Cripps: Some engineering implications of chemical weathering of pyritic shale 281

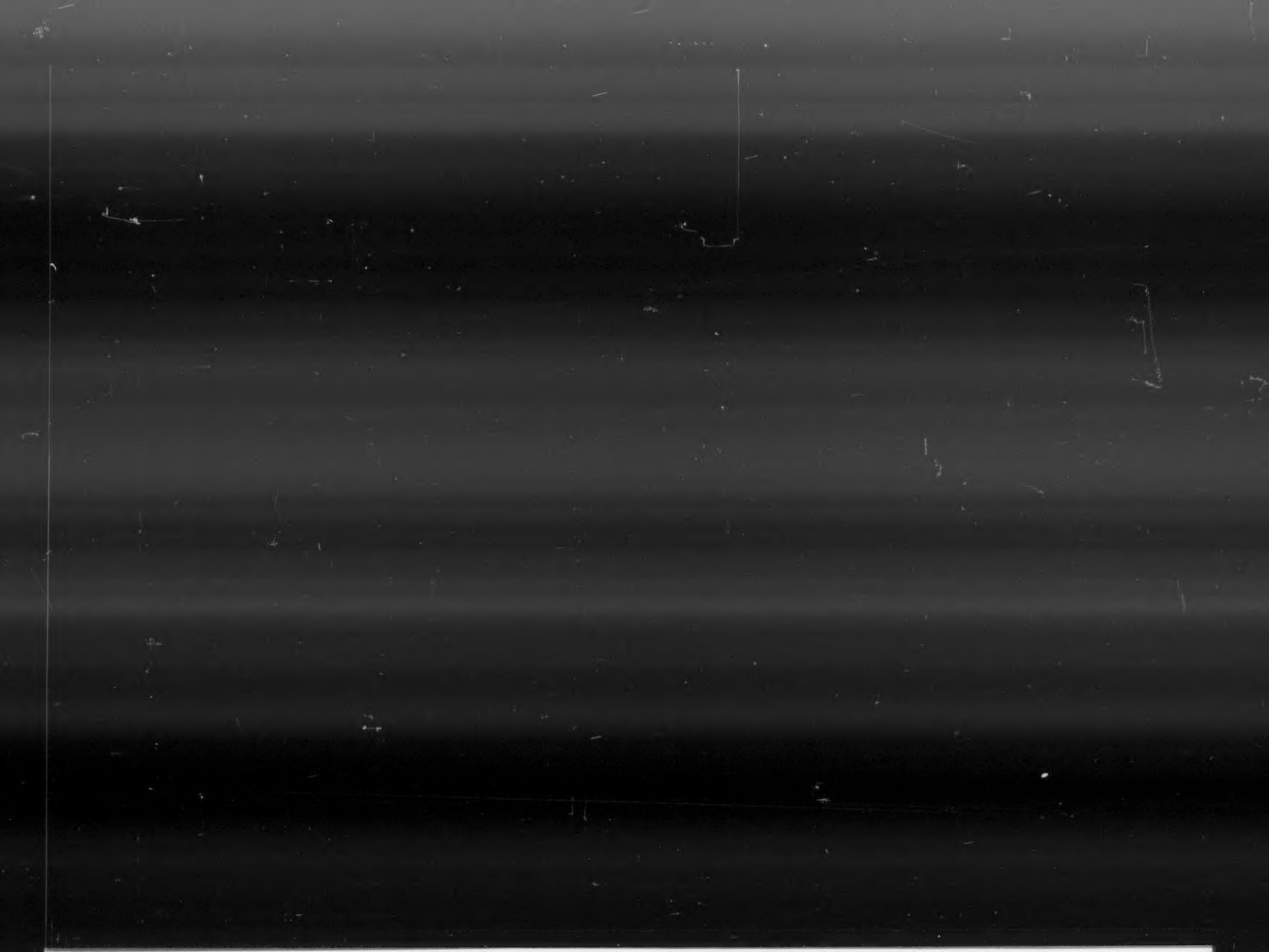
J. Pitts: Geomorphological observations as aids to the design of coast protection works on a part of the Dee estuary 291

R. Chaplow: Engineering geomorphological investigations of a possible landslide, Killicrankie Pass, Scotland 301

S. Penn, C. J. Royce & C. J. Evans: The periglacial modification of the Lincoln scarp 309

M. D. Wright: The distribution and engineering significance of superficial deposits in the Upper Clydach Valley, South Wales 319

D. K. C. Jones, D. Brunsden & A. S. Goudie: A preliminary geomorphological assessment of part of the Karakoram Highway 331

G. M. Binnie: Postscript to 'The collapse of the Dale Dyke dam in retrospect' . 357

J. W. Hooper: Soft rocks and soils *Report of meeting* 359